

# Product datasheet

Specifications



## Photoelectric sensors XU, XU8, BGS, 90°, Sn 0.12 m, 24...240VAC/DC, 1/2"

XU8M18MA230WK

### Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	General purpose single mode
Electronic sensor type	Photo-electric sensor
Sensor name	XU8
Sensor design	Cylindrical M18
Detection system	Diffuse with background suppression
Material	Metal
Line of sight type	90° lateral
Type of output signal	Discrete
Supply circuit type	AC/DC
Wiring technique	2-wire
Discrete output function	1 NO
Electrical connection	1 male connector 1/2"20 UNF, 3 pins
Product specific application	-
Emission	Infrared diffuse with background suppression
[Sn] nominal sensing distance	0.12 m diffuse with background suppression

### Complementary

Enclosure material	Nickel plated brass
Lens material	PMMA
Maximum sensing distance	0.12 m
Output type	Solid state
Add on output	Without
Status LED	1 LED (yellow) for output state
[Us] rated supply voltage	24...240 V AC/DC
Supply voltage limits	20...264 V AC/DC
Maximum residual current	1.5 mA open state
Switching capacity in mA	10...200 mA (to be used with 0.4 A quick-blow fuse in series with the load)
Switching frequency	<= 25 Hz

Maximum voltage drop	<6 V (closed state)
Maximum delay first up	300 ms
Maximum delay response	20 ms
Maximum delay recovery	20 ms
Setting-up	Sensitivity adjustment
Diameter	18 mm
Length	110 mm
Net weight	0.075 kg

## Environment

Product certifications	UL CSA CE
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-40...70 °C
Vibration resistance	7 gn, amplitude = +/- 1.5 mm (f = 10...55 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn (duration = 11 ms) conforming to IEC 60068-2-27
IP degree of protection	IP67 conforming to IEC 60529

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	95.0 g
Package 1 Height	4.2 cm
Package 1 width	9.6 cm
Package 1 Length	13.2 cm
Unit Type of Package 2	S02
Number of Units in Package 2	22
Package 2 Weight	2.545 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

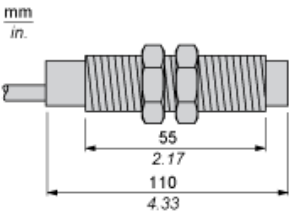
## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>

Contractual warranty

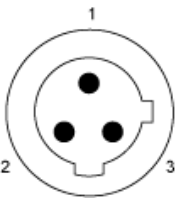
Warranty	18 months
----------	-----------

Dimensions



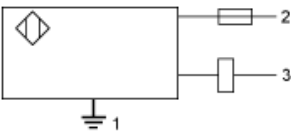
Wiring Schemes

Connector



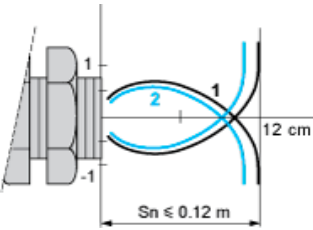
- 1 : Grounding
- 2 : AC/DC
- 3 : AC/DC

2-wire AC or DC



Detection Curves

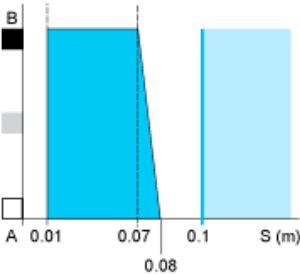
Diffuse System with Adjustable Background Suppression



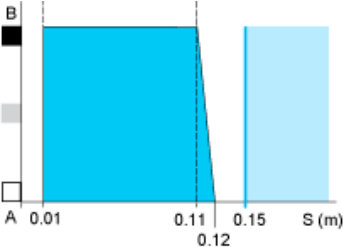
- 1 : White 90%
  - 2 : Grey 18%
- Object 10 x 10 cm

Variation of Usable Sensing Distance Su

Potentiometer Set at Minimum



Potentiometer Set at Maximum



- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

- A-B : Object reflection coefficient
- (1) Black 6%
  - (2) Grey 18%
  - (3) White 90%
  - (4) Sensing range
  - (5) Non sensing zone (matt surfaces)